

in another paper dealing primarily with the systematic standing of *P. longistylum* Small and its close relatives.

P. longistylum, originally described from the long-styled form alone, was reported by Robinson¹ as heterostyl, and the fact also noted by that author and Fernald in the seventh edition of Gray's Manual. In contradistinction to the conditions in the amphibious group, the style in *P. longistylum* is definitely reduced in the short-styled form. Here, also, short-styled forms tend to sterility, but the percentage of barrenness is by no means so great as that which obtains in the amphibious group. Usually a short-styled panicle will produce at least a few apparently normal fruits. Here, as in the amphibious group, the flower-types are segregated, or virtually so, so that the condition is practically a dioecious one. A perennial plant described as new in another paper in this series displays the same type of heterostyly.

It is of interest to observe that in *Polygonum pensylvanicum*, closely related to *P. longistylum*, and still more in *P. mexicanum*, of the same group, a trend toward heterostyly may often be observed, but, so far as noted by the writer in the examination of a considerable amount of material, it does not reach the point of segregation of types, nor does there appear to be any great variation among plants in percentage of sterility.

It is highly probable that a study of the flower-form of members of the subgenus *Persicaria* in other sections of the world will bring to light other cases of heterostyly.

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PROPER USE OF THE NAME LEONTODON.

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THE English name dandelion, the French name dent-de-lion, and the Latin names *dens-leonis* and *leontodon* all mean exactly the same thing and have the same derivation. As stated by Tournefort in 1719 (Instit. 469). "Dens leonis à foliorum formâ, quae Leonis maxillam dentibus suis instructam aemulari existimatur."

Tournefort treated the dandelions and related plants under the generic name *Dens leonis*. Linnaeus rejected double headed generic

¹ Robinson, *Notes on some Polygonums of western North America*. Proc. Bost. Soc. Nat. Hist. xxxi. 265 (1904).

names, and directly substituted the name *Leontodon* (*Philosophia Botanica* 160 sec. 221).

Following is the description of the genus *Leontodon* given by Linnaeus in 1754 in the fifth edition of the *Genera Plantarum*.

"817. LEONTODON.* *Dens Leonis* Tournef. 266. Vaill. A. G. 1721. 50. 12. *Taraxaconoides* Vaill. A. G. 1721. 21.

"CAL. *Communis* imbricatus, oblongus: *Squamis interioribus* linearibus, parallelis, aequalibus, apice dehiscentibus. *S. exterioribus* paucioribus, saepe reflexis ad basin.

"COR. *Composita* imbricata, uniformis: *corollulis hermaphroditis* numerosis, aequalibus.

"*Propria* monopetala, ligulata, linearis, truncata, quinquedentata.

"STAM. *Filamenta* quinque, capillaria, vix notabilia. *Anthera* cylindracea, tubulata.

"PIST. *Germen* infra corollam propriam. *Stylus* filiformis, longitudine ferme corollae. *Stigmata* duo, revoluta.

"PER. nullum. *Calyx* oblongus, rectus.

"SEM. solitaria, oblonga, scabra, terminata *Stipite* longissimo, pappigero.

"REC. nudum, punctatum.

"OBS. *Dens Leonis* V. pappo simplici seu capillari gaudet, & calycis squamis exterioribus reflexis.

"*Taraxaconoides* V. Pappo plumoso seu radiato & calycis squamis omnibus erectis distinguitur."

In the first edition (1753) of the *Species Plantarum* (p. 798) the following species are listed:

(1) *Taraxacum*; (2) *bulbosum*; (3) *Dandelion*; (4) *autumnale*; (5) *tuberosum*; (6) *hispidum*.

No. 1 is the common dandelion and represents the group treated by Linnaeus as typical *Dens Leonis*.

No. 2 is a species of *Crepis* (*Index Kewensis*).

No. 3 is the North American *Krigia Dandelion*.

Nos. 4 and 5 and 6 belong to the genus treated in Britton and Brown's *Illustrated Flora* as *Apargaea* and belong to the group *Taraxaconoides* referred to by Linnaeus.

The first use of the name *Taraxacum* after 1753 with which I am acquainted was by Ludwig Def. Gen. 175 (1760), referred to in Gray's *Manual*. Ludwig included in *Taraxacum* the same two groups *Dens Leonis* and *Taraxaconoides* as did Linnaeus. He did not divide the genus. He merely substituted the name *Taraxacum* for *Leontodon*.

In 1763 Adanson (Fam. Pl. 2: 112) divided the genus into *Virea* and *Leontodon*. He retained the name *Leontodon* for *Dens Leonis* of Tournefort (Table p. 569), and established the genus *Virea* for *Taraxaconoides* Vaill. (Table p. 618), citing as a species "Dens leon foliis hirsut. hieracium, C. B. Prod. 63." i. e., *Leontodon hispidum* L. As far as I have found he was the first author to divide the genus, and he divided it entirely correctly.

In 1772 Scopoli (Fl. Carn. (Ed. 2) 2: 99, 111) divided the genus in a different way. For the common dandelion he constituted the genus *Hedypnois*, and he retained the name *Leontodon* for the species forming the group referred to by Linnaeus as *Taraxaconoides*. Out of this failure of Scopoli to pay attention to the previous work of Adanson has arisen I believe the nomenclatural troubles in the group.

The carefully worked out provisions of the American Code of Nomenclature require the use of the generic name *Leontodon* for the common dandelion and its allies. These provisions are very clear and specific.

The much less carefully worked out provisions of the International Code are in the present case equally definite. That code provides "When a genus is divided if the genus contains a section or some other division which, judging by its name or its species, is the type or origin of the group, the name is reserved for that part of it." Under this provision it is self-evident that the Linnaean generic name *Leontodon* must be reserved for the group referred to by him as *Dens leonis* and not for the group *Taraxaconoides*. If one uses the method of residues the same result is again reached.

The use of the name *Leontodon* for a group of plants to which the common dandelion is not referred is directly contrary to the provisions both of the American Code and the International Code. It should be abandoned.

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CLADONIA MATEOCYATHA, A NEW SPECIES, AND SOME VARIATIONS IN *C. BEAUMONTII*.

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THE *Cladonia* collector, particularly if his activities take him into eastern Massachusetts, is sure to meet with a plant which, in well developed states, might suggest to him a relationship to *Cladonia*